

+

+

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

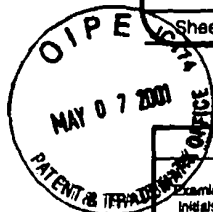
Complete if Known

Application Number	09/807,236
Filing Date	April 9, 2001
First Named Inventor	Lynn M. Abell et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	BB1255 US PCT

(use as many sheets as necessary)

Sheet	1	of	1
-------	---	----	---

Attorney Docket Number	BB1255 US PCT
------------------------	---------------

[illegible][illegible]

**Examiner
Signature**

Krista Lunde

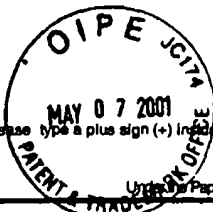
Date Considered

11/20/03

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231**

+



Please type a plus sign (+) inside this box →



PTO/SB/08B(06-00)

Approved for use through 10/31/2002. OMB 0661-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 2

Complete If Known

Application Number	09/807,236
Filing Date	April 9, 2001
First Named Inventor	Lynn M. Abell et al.
Group Art Unit	Unknown
Examiner Name	Unknown
Attorney Docket Number	BB1255 US PCT

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CJZ		K. FUJIMORI ET AL., Mol. Gen. Genet., vol. 259:216-223, 1998, Molecular cloning and characterization of the gene encoding N ⁴ -(5'-phosphoribosyl)-formimino-5-aminimidazole-4-carboxamide ribonucleotide (BBM II) isomerase from <i>Arabidopsis thaliana</i>	
		RENATO FANI ET AL., Gene, vol. 197:9-17, 1997, Paralogous histidine biosynthetic genes: evolutionary analysis of the <i>Saccharomyces cerevisiae</i> HIS6 and HIS7 genes	
		JEANMOUGIN, F. ET AL., TIBS Trends in Biochem. Sciences, vol. 23(10):403-405, 1998, Multiple sequence alignment with Clustal X	
		PEER BORK ET AL., Protein Science, vol. 4:268-274, 1995, Divergent evolution of a beta/alpha-barrel subclass: Detection of numerous phosphate-binding sites by motif search	
		DENIS L. CRANE ET AL., Curr. Genet., vol. 26:443-450, 1994, The <i>Pichia pastoris</i> HIS4 gene: nucleotide sequence, creation of a non-reverting his4 deletion mutant, and development of HIS4-based replicating and integrating plasmids	
		RENATO FANI ET AL., J. Mol. Evol., vol. 41:760-774, 1995, Molecular Evolution of the Histidine Biosynthetic Pathway	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO. A1899888, 07-28-99, SHOEMAKER, R. ET AL.,	
		EMBL SEQUENCE DATABASE LIBRARY ACCESSION NO. A1901450, 07-28-99, WALBOT, V., Maize ESTs from various cDNA libraries sequenced at Stanford University	
		MICHAEL N. MARGOLIES ET AL., Journ. of Biol. Chem., vol. 241(14):3202-3209, 1966, Isolation of the Fourth Enzyme (Isomerase) of Histidine Biosynthesis from <i>Salmonella typhimurium</i>	
		P. E. HARTMAN ET AL., J. Gen. Microbiol., vol. 22:323-353, 1960, Fine Structure Mapping by Complete Transduction between Histidine-requiring <i>Salmonella</i> Mutants	
		ALEXANDRA E. SHEDLOVSKY ET AL., vol. 237:3725-3730, 1988, J. Biol. Chem., A defect in Histidine Biosynthesis Causing an Adenine Deficiency	

Examiner
Signature

Christian J. Ponce

Date
Considered

11/20/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box → ☐

PTO/SB/088(08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO		Complete If Known			
		Application Number	09/807,236		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	April 9, 2001		
		First Named Inventor	Lynn M. Abell et al.		
		Group Art Unit	Unknown		
		Examiner Name	Unknown		
Sheet	2	of	2	Attorney Docket Number	BB1255 US PCT

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
C27		ALEXANDRA E. SHEDLOVSKY ET AL., Journ. of Biol. Chem., vol. 237:3731-3736, 1962, The Enzymatic Basis of an Adenine-Histidine Relationship in Escherichia coli	
		RICHARD J. GALLOWAY ET AL., Journ. of Bacteriology, vol. 144(1):1068-1075, 1980, Histidine Starvation and Adenosine 5'-Triphosphate Depletion in Chemotaxis of Salmonella typhimurium	
		JUN-ICHI SHIOI ET AL., Journ. of Biol. Chem., vol. 257(14):7969-7975, 1982, Requirement of ATP in Bacterial Chemotaxis	
		K. BURTON, Biochem., J., vol. 81:473-483, 1955, The relation between the synthesis of deoxyribonucleic acid and the synthesis of protein in the multiplication of bacteriophage T2	
		K. BURTON, Biochem., J., vol. 68:488, 1957, A catalytic action of L-Histidine in Purine Biosynthesis	
		JENS STOUGAARD ET AL., Journ. of Bacteriology, vol. 170(1):250-257, 1988, Regulation of nitrogenase synthesis in histidine auxotrophs of Klebsiella pneumoniae with Altered levels of Adenylate Nucleotides	
		MARK S. JOHNSON ET AL., App. & Environ. Microbiology, vol. 59(10):3509-3512, 1993, Comparison of methods for specific depletion of ATP in Salmonella typhimurium	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 3449282, 02-05-99, FUJIMORI, K. ET AL., Molecular cloning and characterization of the gene encoding N ⁶ -(5'-phosphoribosyl)-formimino-5-aminimidazole-4-carboxamide ribonucleotide (BBM II) isomerase from Arabidopsis thaliana	
		NATIONAL CENTER FOR BIOTECHNOLOGY INFORMATION GENERAL IDENTIFIER NO. 1723254, 12-15-99, MURPHY, L.	

Examiner Signature	<i>Christina E. Burke</i>	Date Considered	11/20/03
--------------------	---------------------------	-----------------	----------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.